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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,234	12/27/2000	Linden Minnick	10559-386001 / P10193	6622

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12390 EL CAMINO REAL
SAN DIEGO, CA 92130-2081

EXAMINER

PHAN, TAM T

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 05/21/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Handwritten signature

Office Action Summary

Application No.

09/750,234

Applicant(s)

MINNICK, LINDEN

Examiner

Tam (Jenny) Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. This application has been examined. Claims 1-29 are presented for examination.

Priority

2. No priority claims have been made.
3. The effective filing date for the subject matter defined in the pending claims in this application is 12/27/2000.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claims 1, 5-6, 12, 16-17, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Pickreign et al. (U.S. Patent Number 6,732,249), hereinafter referred to as Pickreign.
6. Regarding claim 1, Pickreign disclosed a method comprising allocating space in a host, memory for use as a buffer; copying contents of a memory of a network interface controller into the buffer; and accessing the buffer in response to a request for information in the network interface controller memory (Figures 1 & 3, column 1 lines 41-56, column 2 lines 5-9, column 6 lines 46-63, column 7 lines 41-44, claim 1).
7. Regarding claim 5, Pickreign disclosed a method further comprising: initializing a physical layer; and subsequently initializing the buffer to store the contents of the network interface controller memory (Figure 3, column 3 lines 50-61, column 6 lines 53-63).

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8. Regarding claim 6, Pickreign disclosed a method wherein the network interface controller memory comprises an EEPROM (Figure 1, column 1 lines 28-32).

9. Regarding claims 12 and 16-17, the apparatus corresponds directly to the method of claims 1 and 5-6, and thus these claims are rejected using the same rationale.

10. Regarding claim 22, the article comprising a computer readable medium corresponds directly to the method of claim 1 and the apparatus of claim 12 and thus is rejected using the same rationale.

11. Since all the limitations of the claimed invention were disclosed by Pickreign, claims 1, 5-6, 12, 16-17, and 22 are rejected.

12. Claims 1, 5, 12, 16, 22, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Fesas, Jr. (U.S. Patent Number 6,397,316), hereinafter referred to as Fesas.

13. Regarding claim 1, Fesas disclosed a method comprising allocating space in a host, memory for use as a buffer; copying contents of a memory of a network interface controller into the buffer; and accessing the buffer in response to a request for information in the network interface controller memory (Figure 1, Figure 8, column 4 lines 38-58, column 5 lines 47-64, column 7 lines 38-41).

14. Regarding claim 5, Fesas disclosed a method further comprising initializing a physical layer and subsequently initializing the buffer to store the contents of the network interface controller memory (Figure 1, column 5 lines 56-60, column 6 lines 12-16, column 11 lines 50-56).

15. Regarding claims 12 and 16, the apparatus corresponds directly to the method of claims 1 and 5, and thus these claims are rejected using the same rationale.

16. Regarding claims 22 and 26, the article comprising a computer readable medium corresponds directly to the method of claims 1 and 5 and the apparatus of claim 12 and 16, and thus is rejected using the same rationale.

17. Since all the limitations of the claimed invention were disclosed by Fesas, claims 1, 5, 12, 16, 22, and 26 are rejected.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 2, 6, 7-8, 11, 13, 17-18, 23, 27, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fesas, Jr. (U.S. Patent Number 6,397,316) in view of Crocket et al. (U.S. Patent Number 6,260,124) hereinafter referred to as Crockett.

20. Regarding claim 2, Fesas disclosed a method comprising allocating space in a host, memory for use as a buffer; copying contents of a memory of a network interface controller into the buffer; and accessing the buffer in response to a request for information in the network interface controller memory (Figure 1, Figure 8, column 4 lines 38-58, column 5 lines 47-64, column 7 lines 38-41).

21. Fesas taught the invention substantially as claimed. However, Fesas did not expressly teach modifying the contents of the network interface controller memory and correspondingly modifying the contents of the buffer [synchronizing data].

22. Fesas suggested exploration of art and/or provided a reason to modify the method with the synchronizing data feature (column 3 lines 31-36).

23. Crockett disclosed a method comprising modifying the contents of the network interface controller memory [primary storage] and correspondingly modifying the contents of the buffer [secondary storage] (Title, Abstract, Figure 4, column 2 lines 42-56, column 7 lines 26-55).

24. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Fesas with the teachings of Shah to include the synchronizing data feature in order to maintain data integrity (column 3 lines 28-31) since any updates written to the main storage should also be written in the secondary storage (column 3 lines 11-20).

25. Regarding claim 6, Crockett disclosed a method wherein the network interface controller memory comprises an EEPROM (column 6 lines 1-6, lines 37-56).

26. Regarding claim 7, Fesas and Crockett combined disclosed a method comprising: copying contents of a network interface controller memory into a buffer in host memory (Fesas, Figure 1, Figure 8, column 4 lines 38-58, column 5 lines 47-64, column 7 lines 38-41); recopying the contents of the network interface controller memory into the buffer if the contents of the network interface controller memory are modified (Crockett, Title, Abstract, Figure 4, column 2 lines 42-56, column 7 lines 26-55); and accessing the buffer in response to a request for information in the network interface controller memory (Fesas, Figure 1, Figure 8, column 4 lines 38-58, column 5 lines 47-64, column 7 lines 38-41).

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27. Regarding claim 8, Fesas disclosed a method further comprising initializing a driver to allocate memory space to the buffer (column 5 lines 55-65).

28. Regarding claim 11, Fesas and Crockett combined disclosed a method further comprising initializing the buffer to store the contents of the network interface controller memory in response to a first request to read the contents of the network interface controller memory (Fesas, column 5 lines 49-65; Crockett, column 2 lines 29-41, column 4 lines 30-33).

29. Regarding claims 13, 17, and 23, these limitations are similar to the limitations of claims 2 and 6, and thus these claims are rejected using the same rationale.

30. Regarding claims 18 and 21, the apparatus corresponds directly to the method of claims 7 and 11, and thus these claims are rejected using the same rationale.

31. Regarding claims 27 and 29, the article comprising a computer readable medium corresponds directly to the method of claims 7 and 11 and the apparatus of claims 18 and 21, and thus is rejected using the same rationale.

32. Since all the limitations of the claimed invention were disclosed by the combination of Fesas and Crockett, claims 2, 6, 7-8, 11, 13, 17-18, 23, 27, and 29 are rejected.

33. Claims 3-4, 14-15, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fesas, Jr. (U.S. Patent Number 6,397,316) in view of Shah et al. (U.S. Patent Number 6,470,397) hereinafter referred to as Shah.

34. Regarding claim 3, Fesas disclosed a method comprising allocating space in a host, memory for use as a buffer; copying contents of a memory of a network interface controller into the buffer; and accessing the buffer in response to a request for information in the network

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interface controller memory (Figure 1, Figure 8, column 4 lines 38-58, column 5 lines 47-64, column 7 lines 38-41).

35. Fesas taught the invention substantially as claimed. However, Fesas did not expressly teach initializing a device driver in a Network Driver Interface Specification [NDIS] environment to allocate the space in the host memory.

36. Fesas suggested exploration of art and/or provided a reason to modify the method with the initializing a device driver in a NDIS environment feature [NDIS miniport is conventional in performing hardware-specific operations needed to manage the Network Interface Card] (Figure 1 sign 195, column 1 lines 48-58, column 5 lines 47-65).

37. Shah disclosed a method comprising initializing a device driver in a Network Driver Interface Specification [NDIS] environment to allocate the space in the host memory (Figures 3 & 5, column 2 lines 24-37, column 6 lines 12-46) in less than a second [Ethernet emulation through multiple enhanced miniport drivers simultaneously] (column 7 lines 11-17).

38. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Fesas with the teaching of Shah to include the NDIS feature in order to supports multiple Ethernet emulations (column 7 lines 11-17) since in conventional system, the NDIS miniport performs the hardware-specific operations needed to manage the Network Interface Card (column 2 lines 24-37).

39. Regarding claim 4, Fesas and Shah combined disclosed a method comprising initializing the buffer to store the contents of the network interface controller memory wherein initializing the buffer occurs at a different time from the driver initialization (Fesas, column 5 lines 47-65; Shah, column 9 lines 64-67, column 10 lines 1-13, column 11 lines 9-22).

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40. Regarding claims 14-15 and 24-25, these limitations are similar to the limitations of claims 3-4, and thus these claims are rejected using the same rationale.

41. Since all the limitations of the claimed invention were disclosed by the combination of Fesas and Shah, claims 3-4, 14-15, and 24-25 are rejected.

42. Claims 9-10, 19-20, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fesas, Jr. (U.S. Patent Number 6,397,316) in view of Crocket et al. (U.S. Patent Number 6,260,124) hereinafter referred to as Crockett and further in view of Shah et al. (U.S. Patent Number 6,470,397) hereinafter referred to as Shah.

43. The combination of Fesas and Crocket disclosed the memory buffering method characterized with all the limitations listed in the above rejection.

44. Regarding claim 9, the combination of Fesas and Crocket taught the invention substantially as claimed, however, the combination of Fesas and Crocket did not teach initializing a device driver in a Network Driver Interface Specification [NDIS] environment to allocate the space in the host memory.

45. Fesas suggested exploration of art and/or provided a reason to modify the method with the initializing a device driver in a NDIS environment feature [NDIS miniport is conventional in performing hardware-specific operations needed to manage the Network Interface Card] (Figure 1 sign 195, column 1 lines 48-58, column 5 lines 47-65).

46. Shah disclosed a method comprising initializing a device driver in a Network Driver Interface Specification [NDIS] environment to allocate the space in the host memory (Figures 3

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& 5, column 2 lines 24-37, column 6 lines 12-46) in less than a second [Ethernet emulation through multiple enhanced miniport drivers simultaneously] (column 7 lines 11-17).

47. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Fesas with the teaching of Shah to include the NDIS feature in order to supports multiple Ethernet emulations (column 7 lines 11-17) since in conventional system, the NDIS miniport performs the hardware-specific operations needed to manage the Network Interface Card (column 2 lines 24-37).

48. Regarding claim 10, Fesas and Shah combined disclosed a method comprising initializing the buffer to store the contents of the network interface controller memory wherein initializing the buffer occurs at a different time from the driver initialization (Fesas, column 5 lines 47-65; Shah, column 9 lines 64-67, column 10 lines 1-13, column 11 lines 9-22).

49. Regarding claims 19-20 and 28, these limitations are similar to the limitations of claims 9-10, and thus these claims are rejected using the same rationale.

50. Since all the limitations of the claimed invention were disclosed by the combination of Fesas, Crockett, and Shah, claims 9-10, 24-25, and 28 are rejected.

Conclusion

51. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details and complete listing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam (Jenny) Phan whose telephone number is (703) 305-4665. The examiner can normally be reached on M-F 9:00-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on 703-308-3873. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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May 17, 2004


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